

# ASG-SmartEdit™ Quick Reference Guide

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ASG Worldwide Headquarters Naples, Florida USA | [asg.com](http://asg.com)

1333 Third Avenue South, Naples, Florida 34102 USA Tel: 941.435.2200 Fax: 941.263.3692 Toll Free: 1.800.932.5536



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- A description of the specific steps that immediately preceded the problem
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- 2 Leave a detailed message including your name and phone number. A Support representative will be paged and will return your call as soon as possible.
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<b>England</b>	44.1727.736305	44.1727.812018	support.uk@asg.com
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<b>Australia</b>	0011.800.9932.5536	<b>Netherlands</b>	00.800.3354.3578
<b>Denmark</b>	00.800.9932.5536	<b>New Zealand</b>	00.800.9932.5536
<b>France</b>	00.800.3354.3578	<b>Singapore</b>	001.800.3354.3578
<b>Germany</b>	00.800.3354.3578	<b>South Korea</b>	001.800.9932.5536
<b>Hong Kong</b>	001.800.9932.5536	<b>Sweden/Telia</b>	009.800.9932.5536
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<b>Japan/IDC</b>	0061.800.9932.5536	<b>United Kingdom</b>	00.800.3354.3578
		<b>All other countries</b>	1.941.435.2200

## ASG Web Site

Visit <http://www.asg.com>, ASG's World Wide Web site.

Submit all product and documentation suggestions to ASG's product management team at <http://www.asg.com/asp/emailproductsuggestions.asp>.

If you do not have access to the web, FAX your suggestions to product management at (941) 263-3692. Please include your name, company, work phone, e-mail ID, and the name of the ASG product you are using. For documentation suggestions include the publication number located on the publication's front cover.



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## Preface

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This *ASG-SmartEdit Quick Start Guide* summarizes the command syntax and usage information for the ASG-SmartEdit (herein called SmartEdit) commands. SmartEdit is a powerful interactive system that helps programmers by automating the process of analyzing COBOL programs.

Allen Systems Group, Inc. (ASG) provides professional support to resolve any questions or concerns regarding the installation or use of any ASG product. Telephone technical support is available around the world, 24 hours a day, 7 days a week.

ASG welcomes your comments, as a preferred or prospective customer, on this publication or on any ASG product.

## About this Publication

The *ASG-SmartEdit Quick Start Guide* consists of these chapters:

- [Chapter 1, "Command Language Syntax,"](#) provides a description and command syntax for the SmartEdit commands.
- [Chapter 2, "Operand Definitions,"](#) defines the command operands.
- [Chapter 3, "Tree View Line Commands,"](#) lists the tree view commands that are valid for SmartEdit.
- [Chapter 4, "Source View Line Commands,"](#) lists the source view commands that are valid for SmartEdit.
- [Chapter 5, "Editor Parameters,"](#) lists the VIASUB/VIASUBDS parameters.

- [Chapter 6, "PF Key,"](#) lists the default and suggested alternate PF key settings.
- [Chapter 7, "Action Bar Commands Equivalents,"](#) lists the pull-down and action equivalent to SmartEdit commands.

## Related Publications

The documentation library for ASG-SmartEdit consists of these publications (where *nn* represents the product version number):

- The *ASG-Center Installation Guide* (CNX0300-*nn*) contains installation and maintenance information for ASG-Center, the common set of libraries shared by the Existing Systems Workbench suite of products. ASG-Center must be installed before installing ASG-SmartEdit.
- The *ASG-SmartEdit Installation Guide* (SET0300-*nn*) provides information about the installation and maintenance of ASG-SmartEdit.
- *ASG-SmartEdit Quick Reference Guide* (SET0600-*nn*) summarizes the syntax and usage of ASG-SmartEdit commands.
- The *ASG-SmartEdit User's Guide* (SET0200-*nn*) describes instructions and commands for using ASG-SmartEdit.

**Note:** \_\_\_\_\_

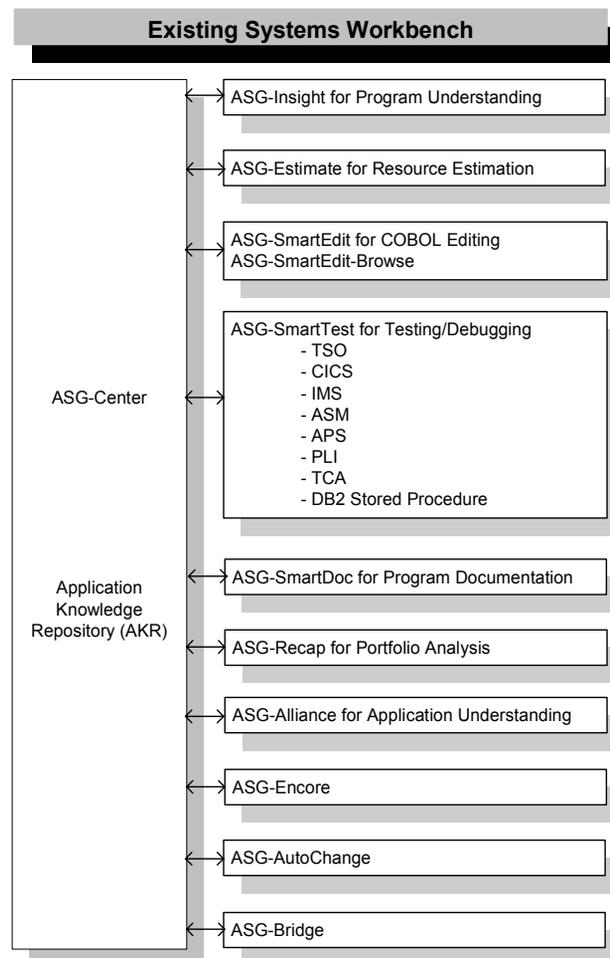
To obtain a specific version of a publication, contact the ASG Service Desk.  
\_\_\_\_\_

## ASG-Existing Systems Workbench (ASG-ESW)

ASG-ESW (herein called ESW) is an integrated suite of components designed to assist organizations in enhancing, redeveloping, or re-engineering their existing systems. ESW products use the Application Knowledge Repository (AKR) to store source program analysis information generated by the Analytical Engine.

[Figure 1](#) represents the components of ESW.

**Figure 1 • ASG Existing Systems Workbench**



This table contains the name and description of each ESW component:

ESW Product	Herein Called	Description
ASG-Alliance	Alliance	The application understanding component that is used by IT professionals to conduct an analysis of every application in their environment. Alliance supports the analysis and assessment of the impact of change requests upon an entire application. Alliance allows the programmer/ analyst to accurately perform application analysis tasks in a fraction of the time it would take to perform these tasks without an automated analysis tool. The impact analysis from Alliance provides application management with additional information for use in determining the resources required for application changes.
ASG-AutoChange	AutoChange	The COBOL code change tool that makes conversion teams more productive by enabling quick and safe changes to be made to large quantities of code. AutoChange is an interactive tool that guides the user through the process of making source code changes.
ASG-Bridge	Bridge	The bridging product that enables field expansion for program source code, without being required to simultaneously expand the fields in files or databases. Because programs are converted in smaller groups, or on a one-by-one basis, and do not require file conversion, testing during the conversion process is simpler and more thorough.

ESW Product	Herein Called	Description
ASG-Center	Center	The common platform for all ESW products. Center provides the common Analytical Engine to analyze the source program and store this information in the AKR. This common platform provides a homogeneous environment for all ESW products to work synergistically.
ASG-Encore	Encore	The program re-engineering component for COBOL programs. Encore includes analysis facilities and allows you to extract code based on the most frequently used re-engineering criteria. The code generation facilities allow you to use the results of the extract to generate a standalone program, a callable module, a complement module, and a CICS server. Prior to code generation, you can view and modify the extracted Logic Segment using the COBOL editor.
ASG-Estimate	Estimate	The resource estimation tool that enables the user to define the scope, determine the impact, and estimate the cost of code conversion for COBOL, Assembler, and PL/I programs. Estimate locates selected data items across an application and determines how they are used (moves, arithmetic operations, and compares). Time and cost factors are applied to these counts, generating cost and personnel resource estimates.

ESW Product	Herein Called	Description
ASG-Insight	Insight	The program understanding component for COBOL programs. Insight allows programmers to expose program structure, identify data flow, find program anomalies, and trace logic paths. It also has automated procedures to assist in debugging program abends, changing a computation, and resolving incorrect program output values.
ASG-Recap	Recap	The portfolio analysis component that evaluates COBOL applications. Recap reports provide function point analysis and metrics information, program quality assessments, intra-application and inter-application comparisons and summaries, and historical reporting of function point and metrics information. The portfolio analysis information can also be viewed interactively or exported to a database, spreadsheet, or graphics package.
ASG-SmartDoc	SmartDoc	The program documentation component for COBOL programs. SmartDoc reports contain control and data flow information, an annotated source listing, structure charts, program summary reports, exception reports for program anomalies, and software metrics.

ESW Product	Herein Called	Description
ASG-SmartEdit	SmartEdit	The COBOL editing component that can be activated automatically when the ISPF/PDF Editor is invoked. SmartEdit provides comprehensive searching, inline copybook display, and syntax checking. SmartEdit allows you to include an additional preprocessor (for example, the APS generator) during syntax checking. SmartEdit supports all versions of IBM COBOL, CICS, SQL, and CA-IDMS.
ASG-SmartTest	SmartTest	The testing/debugging component for COBOL, PL/I, Assembler, and APS programs in the TSO, MVS Batch, CICS (including file services), and IMS environments. SmartTest features include program analysis commands, execution control, intelligent breakpoints, test coverage, pseudo code with COBOL source update, batch connect, disassembled object code support, and full screen memory display.

## Invoking ESW Products

The method you use to invoke an ESW product depends on your system setup. If you need assistance to activate a product, see your systems administrator. If your site starts a product directly, use the ISPF selection or CLIST as indicated by your systems administrator. If your site uses the ESW screen to start a product, initiate the ESW screen using the ISPF selection or CLIST as indicated by your systems administrator and then typing in the product command on the command line.

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## ASG-SmartEdit Quick Start Guide

The product names can also vary depending on whether you access a product directly or through ESW. See ["ESW Product Integration" on page vii](#) for more information about using ESW.

To initialize ESW products from the main ESW screen, select the appropriate option on the action bar pull-downs or type the product shortcut on the command line.

Product Name	Shortcut	ESW Pull-down Options
Alliance	AL	Understand ▶ Application
AutoChange	CC	Change ▶ Conversion Set
Bridge	BR	Change ▶ ASG-Bridge
Encore (Re-engineer)	EN	Re-engineer ▶ Program
Estimate	ES	Measure ▶ ASG-Estimate
Insight (Understand)	IN	Understand ▶ Program
Recap (Portfolio Analysis)	RC	Measure ▶ Portfolio
SmartDoc (Document)	DC	Document ▶ Program
SmartEdit	SE	Change ▶ Program <b>Or</b> Change ▶ Program with Options
SmartTest	ST	Test ▶ Module/Transaction

## **ESW Product Integration**

Because ESW is an integrated suite of products, you are able to access individual ESW products directly or through the main ESW screen. As a result, you might see different fields, values, action bar options, and pull-down options on a screen or pop-up depending on how you accessed the screen or pop-up.

Certain ESW products also contain functionality that interfaces with other ESW products. Using SmartTest as an example, if Alliance is installed, Insight provides a dynamic link to Alliance that can be used to display program analysis information. If Insight is installed and specified during the analyze, the Insight program analysis functions are automatically available for viewing logic/data relationships and execution path. For example, the Scratchpad option is available on the Options pull-down if you have Insight installed. Access to these integrated products requires only that they be installed and executed in the same libraries.





Figure 4 • File - Analyze Submit Screen

```
File - Analyze Submit
Command ==> -----
          E - Edit JCL                      S - Submit JCL

Compile and link JCL (PDS or sequential):
  Data set name 'USER12.REL.CNTL(UIAPCOBC)'
```

Analyze features (Y/N):  
ASG-SmartTest: Y Extended Analysis: N

AKR data set name 'USER12.GENERAL.AKR'  
AKR program name \_\_\_\_\_ (if overriding PROGRAM-ID)

Analyze options:  
-----  
-----  
-----

Compile? (Y/N) . . . . . Y (Y if needed by features)  
Link load module reusable? (Y/N) Y

Figure 5 • File - Analyze Submit Screen (Accessed through ESW)

```
File - Analyze Submit
Command ==> -----
          E - Edit JCL    S - Submit JCL    D - ASG-SmartDoc Options

Compile and link JCL (PDS or sequential):
  Data set name 'USER12.REL.CNTL(HTEST)'
```

Analyze features (Y/N):  
ASG-Insight: Y ASG-SmartTest: Y Extended Analysis: N  
ASG-SmartDoc: N ASG-Encore: N

AKR data set name 'USER12.GENERAL.AKR'  
AKR program name \_\_\_\_\_ (if overriding PROGRAM-ID)

Analyze options:  
-----  
-----  
-----

Compile? (Y/N) . . . . . Y (Y if needed by features)  
Link load module reusable? (Y/N) Y (ASG-SmartTest)

## Conventions

These highlighting conventions are used in this guide:

<b>Convention</b>	<b>Represents</b>
ALL CAPITALS	Directory, path, file, dataset, member, database, program, command, and parameter names.
Initial Capitals on Each Word	Window, field, field group, check box, button, panel (or screen), option names, and names of keys. A plus sign (+) is inserted for key combinations (e.g., Alt+Tab).
<i>lowercase italic monospace</i>	Information that you provide according to your particular situation. For example, you would replace <i>filename</i> with the actual name of the file.
Monospace	Characters you must type exactly as they are shown. Code, JCL, file listings, or command/statement syntax.  Also used for denoting brief examples in a paragraph.
Vertical Separator Bar ( ) with underline	Options available with the default value underlined (e.g., Y  <u>N</u> ).



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# 1

## Command Language Syntax

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This chapter describes the SmartEdit commands and contains these sections:

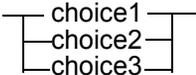
Topic	Page
<a href="#">Command Diagrams</a>	<a href="#">4</a>
<a href="#">&amp; (Retain)</a>	<a href="#">6</a>
<a href="#">ACTION</a>	<a href="#">6</a>
<a href="#">ALLOCDEF</a>	<a href="#">6</a>
<a href="#">BRANCH</a>	<a href="#">7</a>
<a href="#">CHECK</a>	<a href="#">8</a>
<a href="#">COBEDIT</a>	<a href="#">8</a>
<a href="#">CUA</a>	<a href="#">9</a>
<a href="#">DATAMAP</a>	<a href="#">9</a>
<a href="#">DISPLAY</a>	<a href="#">9</a>
<a href="#">EDITCOPY</a>	<a href="#">10</a>
<a href="#">EDITPGM</a>	<a href="#">10</a>
<a href="#">EQUATE</a>	<a href="#">11</a>

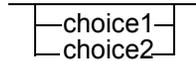
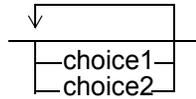
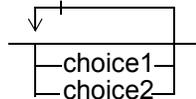
Topic	Page
<a href="#">EXCLUDE</a>	<a href="#">12</a>
<a href="#">FINDXTND</a>	<a href="#">13</a>
<a href="#">HELP</a>	<a href="#">14</a>
<a href="#">HIGH</a>	<a href="#">15</a>
<a href="#">JUMP</a>	<a href="#">15</a>
<a href="#">LEVELS</a>	<a href="#">16</a>
<a href="#">LIST</a>	<a href="#">16</a>
<a href="#">LPRINT</a>	<a href="#">17</a>
<a href="#">LPUNCH</a>	<a href="#">18</a>
<a href="#">PARMDEF</a>	<a href="#">18</a>
<a href="#">PREF</a>	<a href="#">19</a>
<a href="#">PREPROC</a>	<a href="#">19</a>
<a href="#">PRINTLOG</a>	<a href="#">20</a>
<a href="#">PRINTLST</a>	<a href="#">20</a>
<a href="#">PRODLVL</a>	<a href="#">20</a>
<a href="#">RECALL</a>	<a href="#">21</a>
<a href="#">REDO</a>	<a href="#">21</a>
<a href="#">REFRESH</a>	<a href="#">21</a>

Topic	Page
<a href="#">REPEAT</a>	<a href="#">22</a>
<a href="#">RESET</a>	<a href="#">22</a>
<a href="#">RFIND</a>	<a href="#">22</a>
<a href="#">RHIGH</a>	<a href="#">23</a>
<a href="#">RPREF</a>	<a href="#">23</a>
<a href="#">RSCROLL</a>	<a href="#">23</a>
<a href="#">RTREEVW</a>	<a href="#">24</a>
<a href="#">SCROLL</a>	<a href="#">24</a>
<a href="#">SET</a>	<a href="#">25</a>
<a href="#">SWITCH</a>	<a href="#">25</a>
<a href="#">TREEVIEW</a>	<a href="#">26</a>
<a href="#">UPDATE</a>	<a href="#">26</a>
<a href="#">ZOOM COPY</a>	<a href="#">27</a>
<a href="#">ZOOM DEF</a>	<a href="#">27</a>
<a href="#">ZOOMIN/ZOOMOUT</a>	<a href="#">27</a>

## Command Diagrams

These notational conventions and symbols are used to describe command syntax:

Item	Description
ABBREVIations	Illustrates the command abbreviation, which is shown in uppercase letters. Lowercase letters in the command are optional.
lowercase	Indicates user-supplied variable information.
UPPERCASE	Indicates commands or keywords.
<b>Bold</b>	Indicates operands that are available only if SmartEdit is installed and a SmartEdit analysis has been run on the COBOL program being tested.
Underline	Specifies the default value of an operand.
	Separates synonymous commands or operands.
—————>	Indicates that the command syntax is continued on the next line.
—>—————	Indicates the command syntax is continued from the previous line.
—————✕	Indicates the end of the command syntax.
— required —	Indicates that the operand or keyword appearing on the main command line is required.
	Indicates that one operand is required.

Item	Description
	<p>Indicates that an operand or keyword appearing below the main command line is optional.</p>
	<p>Indicates that operands are optional.</p>
	<p>Indicates that more than one operand can be chosen.</p>
	<p>Indicates that operands can be concatenated by placing a plus sign (+) between them.</p>

SmartEdit supports all ISPF/PDF system commands on the appropriate screens (e.g., UP, DOWN, KEYS). Targets are searched in the order listed. A particular kind of target can be selected by entering the optional target-type prefix (e.g., SUBSET, LABEL, DATA). Data name subordinate operands (e.g., REF, ALIAS) pertain to all datanames in a concatenated series. For COBOL II Release 3 and later programs, a data item, label name, or program name that may be ambiguous or used multiple times can be qualified by using OF followed by the program name.

## & (Retain)

Executes the specified primary command and keeps it displayed in the command input area for repeated use or modification.

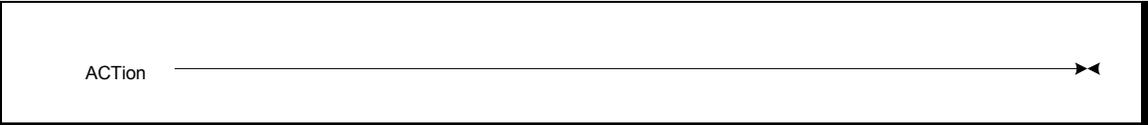


The diagram shows a rectangular command input field with a thick black border. Inside, the text "&any primary command" is followed by a horizontal line that ends in a double-headed arrow pointing to the right.

&any primary command

## ACTION

Initiates the cursor sensitive function previously selected from a pull-down or pop-up

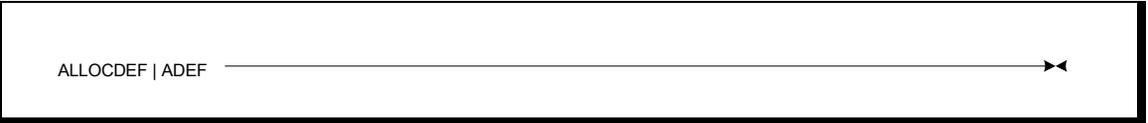


The diagram shows a rectangular command input field with a thick black border. Inside, the text "ACTion" is followed by a horizontal line that ends in a double-headed arrow pointing to the right.

ACTion

## ALLOCDEF

Displays the Options - Product Allocations pop-up used to specify the DASD volumes for the Log, List, Punch, and Work files; and to specify space for the Work file.

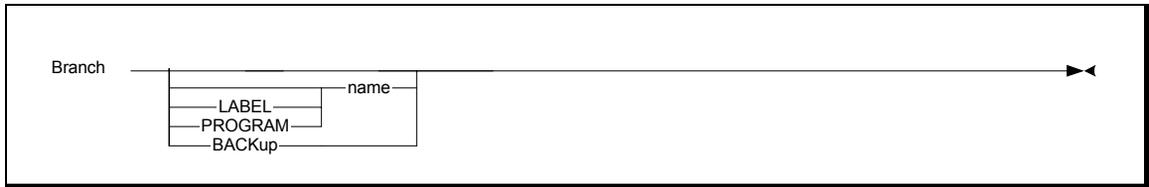


The diagram shows a rectangular command input field with a thick black border. Inside, the text "ALLOCDEF | ADEF" is followed by a horizontal line that ends in a double-headed arrow pointing to the right.

ALLOCDEF | ADEF

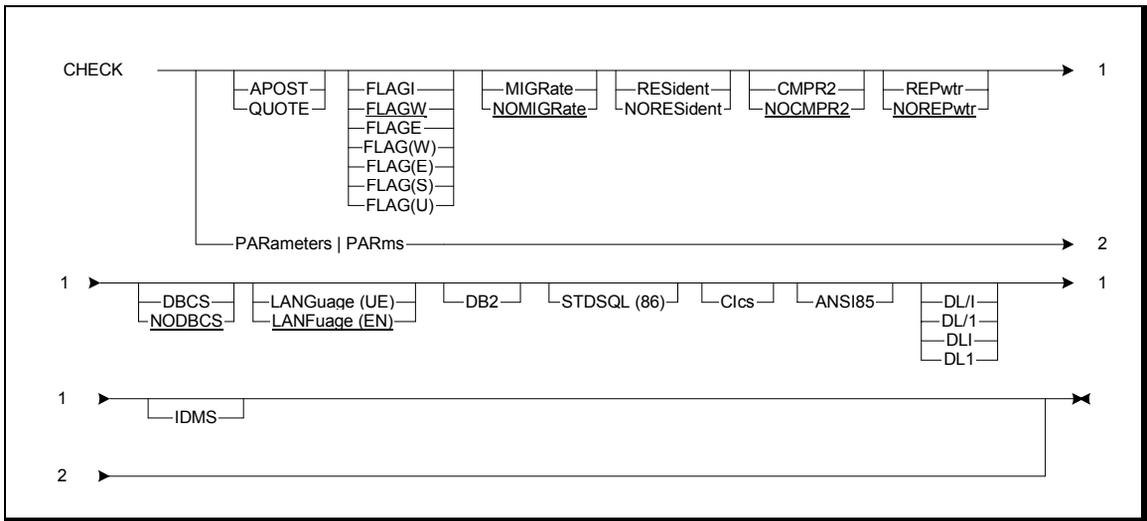
## BRANCH

Positions the cursor at the specified target. Use the BRANCH command when tracking branching logic. You can also use the BRANCH command to scroll from a statement such as a PERFORM, to the paragraph being performed. Then use the BACKUP operand to return to the statement from which the branch occurred. Use PREVIOUS in conjunction with the current cursor location to position the cursor at the GO TO, PERFORM, or CALL statement from which a target was reached.



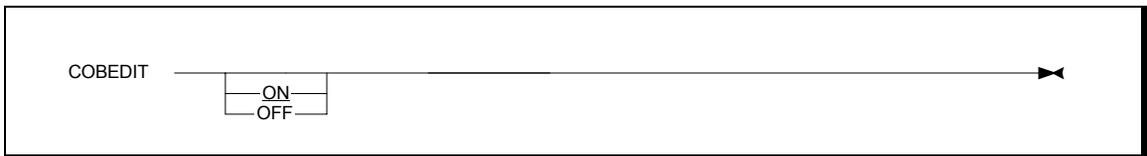
## CHECK

Provides an online syntax check mechanism for the COBOL source currently being edited. The CHECK command performs a syntax check of the program and places syntax error messages directly below the line in which errors are found.



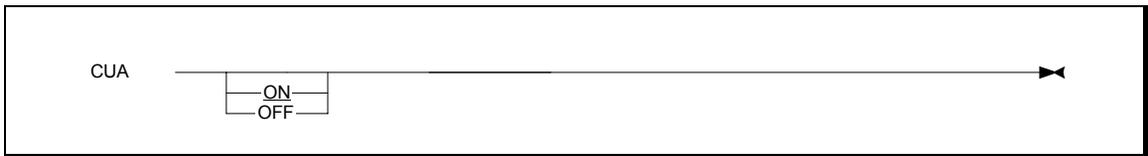
## COBEDIT

Activates and deactivates SmartEdit under ISPF/PDF edit.



## CUA

Displays or removes the SmartEdit CUA action bar from the screen for the current session. To make the setting permanent for your profile, use the SET command. For example, type `SET CUA ON` to display the CUA action.



## DATAMAP

Displays the length of a data item and the length and offset for any data items that are contained within the selected data item. You can also use the DM line command to display the length of a data item.



## DISPLAY

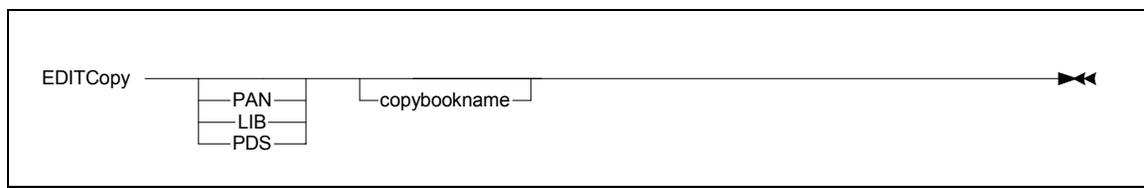
Displays all statements contained in the active Logic Segment (created in Encore) or statements found using the Task facility in Insight. DISPLAY is only valid if Encore and/or Insight are installed.



## EDITCOPY

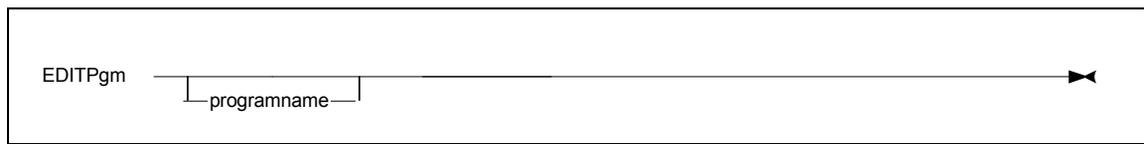
Locates a copybook and opens it in an edit session using your default editor. If SmartEdit is not your default editor, an ISPF edit session is opened for the specified copybook. You can use this command on all copybooks (except certain SQL Includes) that are currently viewable in the edit.

The EDITCOPY command applies to all copybooks that exist in the Copy/Include libraries you specified on the Options - COPY/Include Libraries screen in SmartEdit.



## EDITPGM

Locates a CALLED program and opens it in an edit session using your default editor. If SmartEdit is not your default editor, an ISPF edit session is opened for the specified program. You can use this command on all programs that are currently viewable in the edit.



## EQUATE

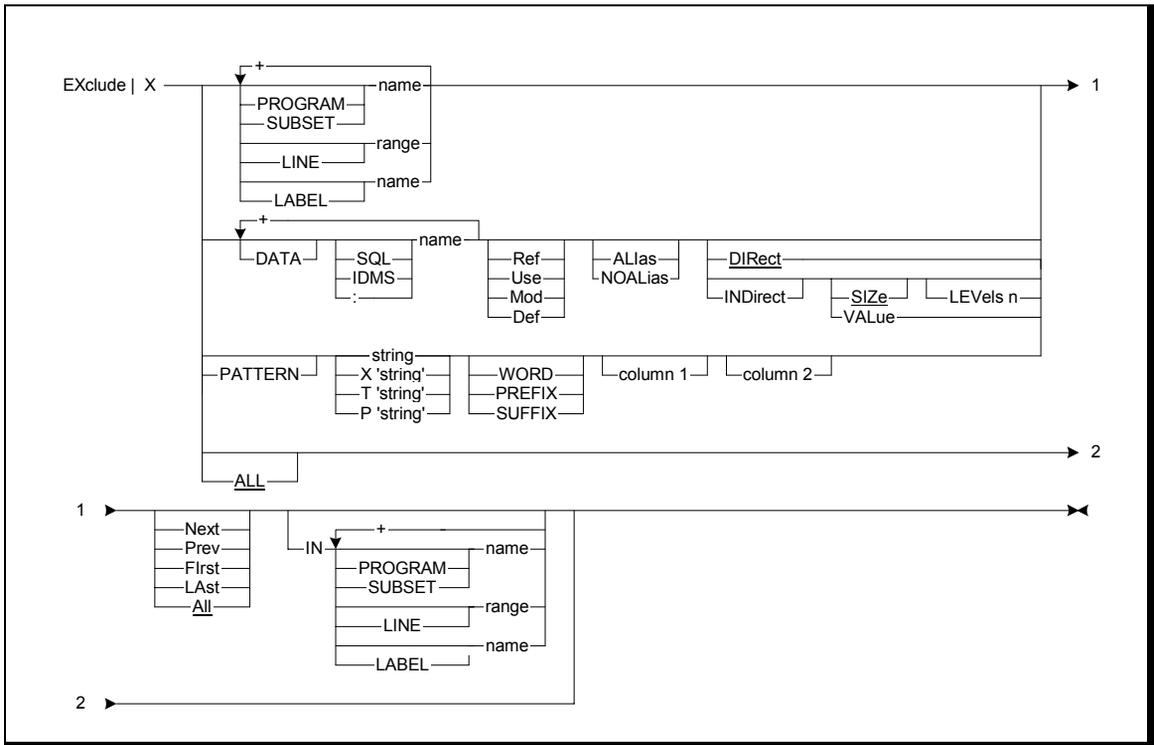
Defines a name for a character string. A character string can be a long command, operand set, pattern, dataname, etc. Use the equated names during SmartEdit sessions to reduce the number of keystrokes. You can also use and save multiple Equate statements in the AKR (see ["SCROLL" on page 24](#)). Type EQUATE and the name without the string to delete an equated name. The substitution string can be changed on the List - Equates pop-up by typing over it with the new value.



The diagram illustrates the syntax for the EQUATE command. It shows the word "Equate" followed by a horizontal line. On this line, the word "name" is positioned above a small rectangular box, and the word "string" is positioned below another small rectangular box. A long horizontal arrow points from the right side of the "string" box to the right edge of the diagram, ending in a double-headed arrowhead.

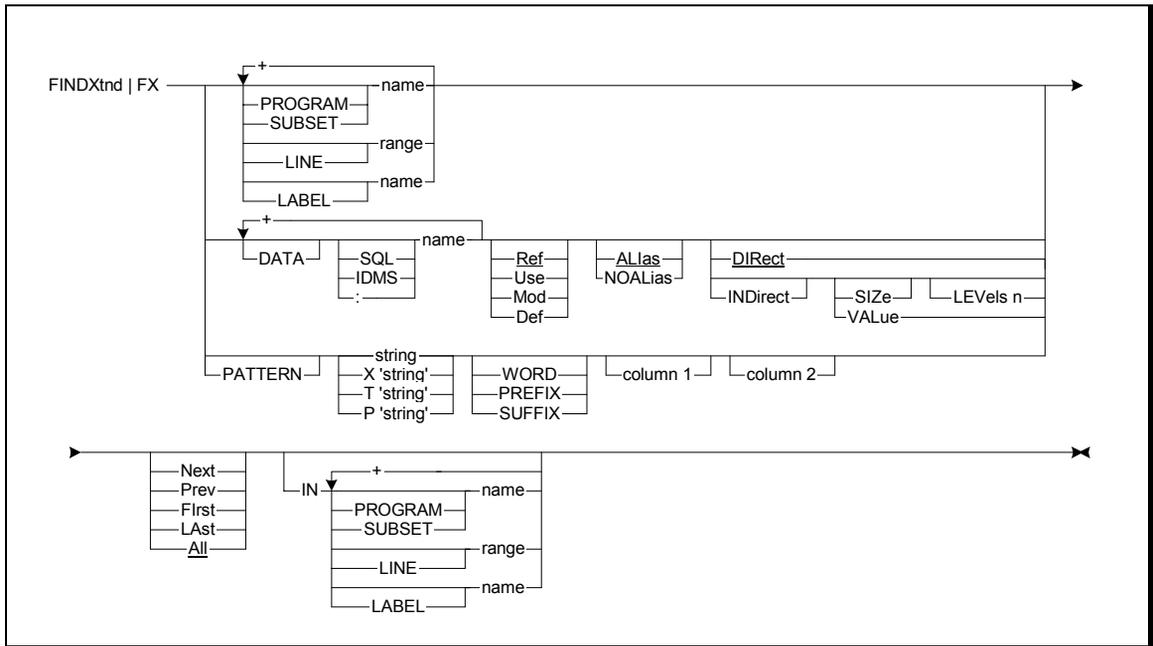
# EXCLUDE

Performs a FINDXTND command on a specific target, excluding the resulting lines. Excluded lines are represented by a line of dashes and text stating *n* LINE(S) NOT DISPLAYED. You can also use the X or XX line commands to exclude lines from the screen.



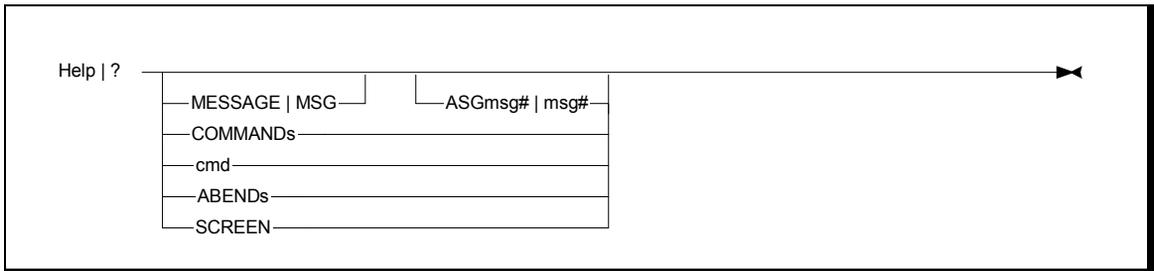
## FINDXTND

Performs a COBOL intelligent search of the source code for one or all occurrences of the specified target. If lines containing results are excluded, they are redisplayed on the screen. Tags indicating the type of target found are placed in columns 73 through 80 of the Source View.



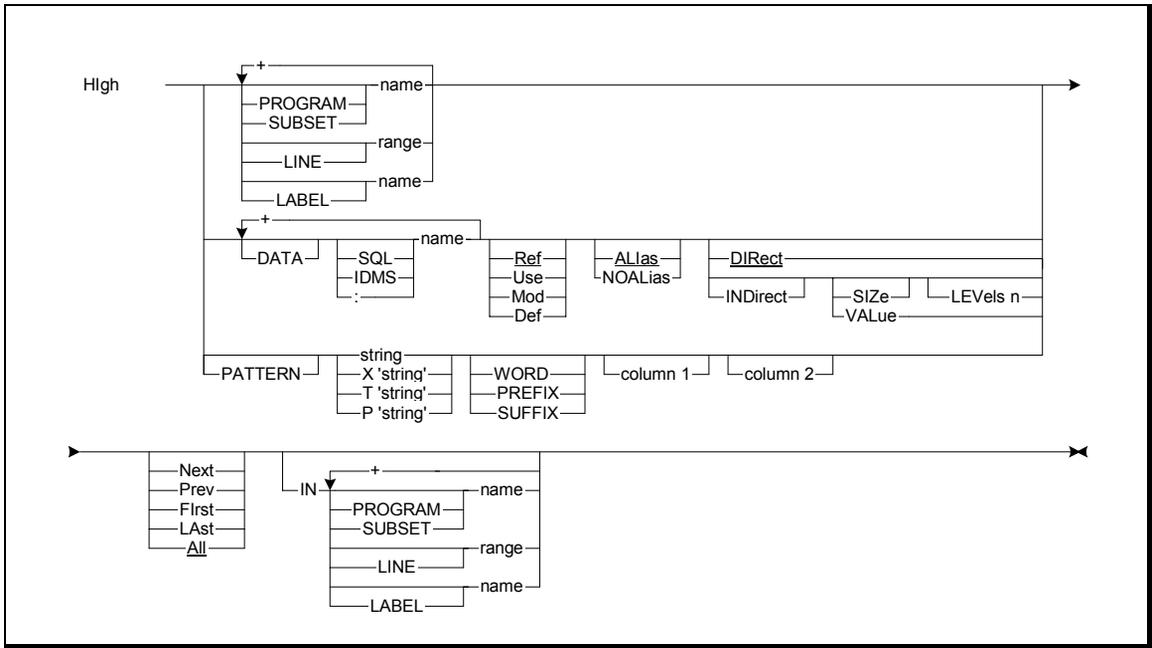
## HELP

Displays information about the current SmartEdit screen, command, or error message. Help is presented as a long message or a tutorial screen. From the Help Tutorial, type `INDEX` and press Enter to display the Index, or type `TOC` and press Enter to display the Table of Contents.



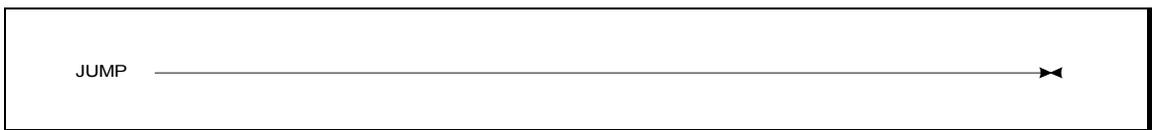
## HIGH

Highlights source code lines containing the specified targets. Lines already highlighted from prior commands are not reset.



## JUMP

Returns to the Source View screen at the location corresponding to the cursor position on the Tree View screen. This command is valid only on a Tree View screen.



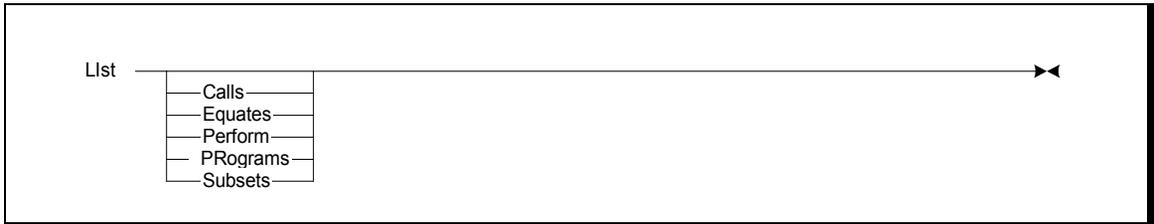
## LEVELS

Redisplays the Tree View screen to the  $n$ th level. If there are less than  $n$  levels displayed, they are expanded to the requested level. If there are greater than  $n$  levels displayed, they are removed.



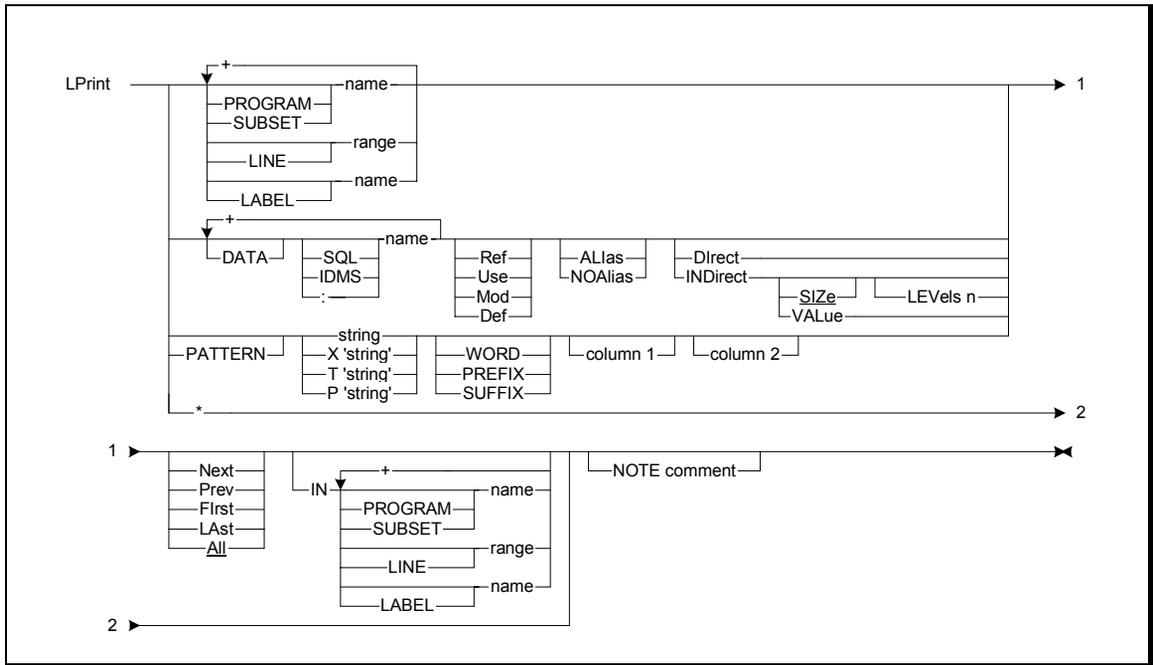
## LIST

Displays the specified pop-up. Using the LIST command with no operand displays the List Menu pop-up.



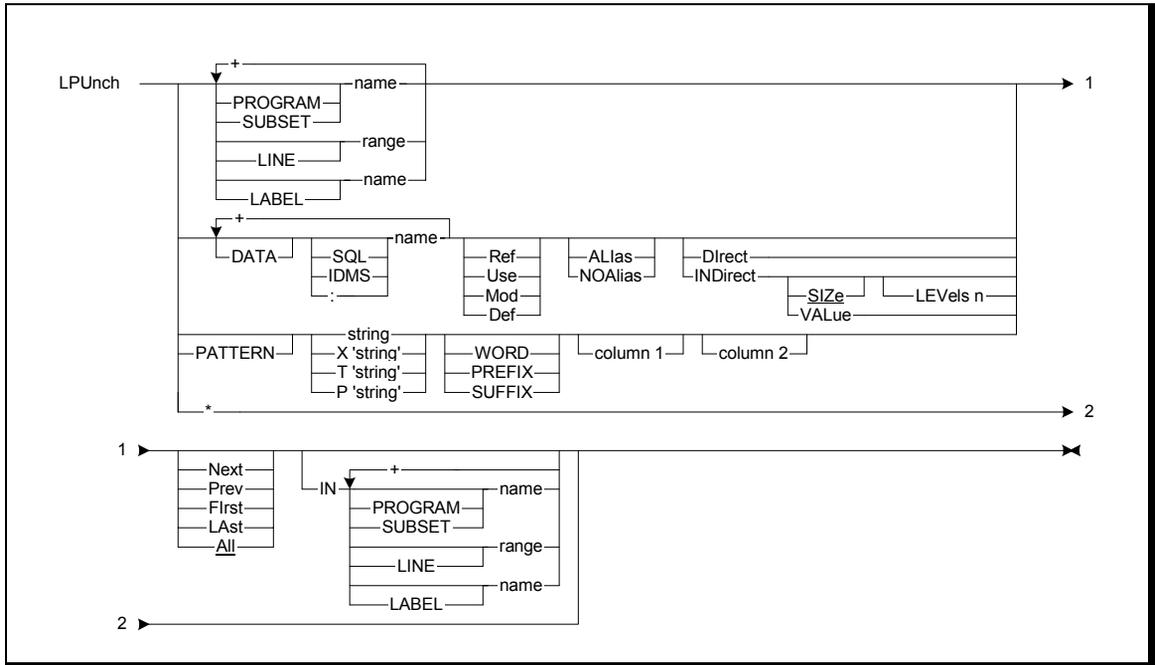
# LPRINT

Copies lines containing the requested target to the List file. Entering LPRINT \* causes the entire virtual screen (all data that can be viewed by scrolling forward and backward) to be copied to the List file.



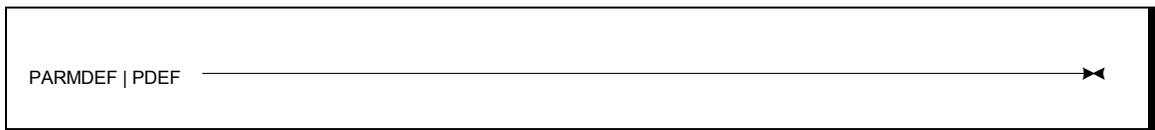
## LPUNCH

Copies lines containing the specified target to the Punch file for subsequent processing. Entering LPUNCH \* causes the entire virtual screen (all data that can be viewed by scrolling forward and backward) to be copied to the Punch file.



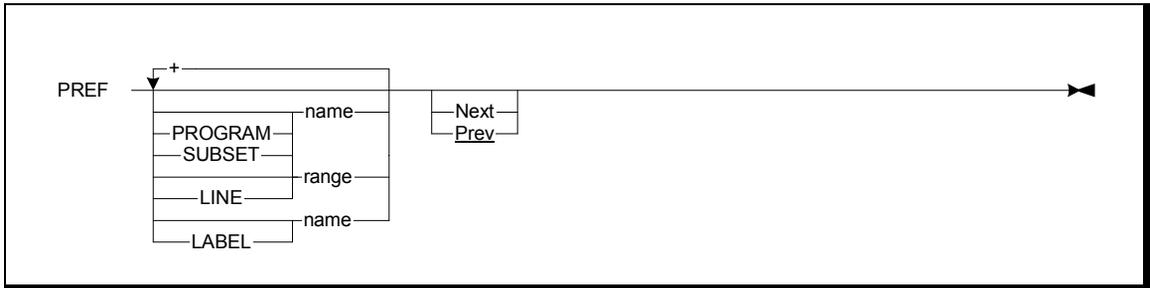
## PARMDEF

Displays the Options - Product Parameters pop-up used to set parameters that affect the online operation of SmartEdit.



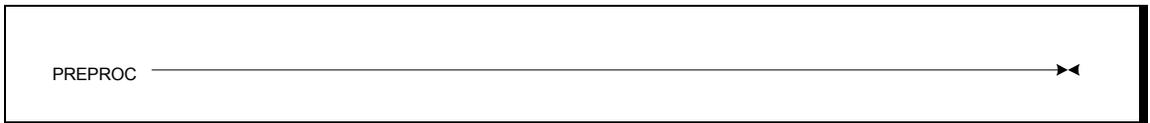
## PREF

Displays the View - Paragraph Cross Reference pop-up for the requested target. The View - Paragraph Cross Reference pop-up shows how control is transferred to or from the target. PREF includes all paragraphs containing the target lines.



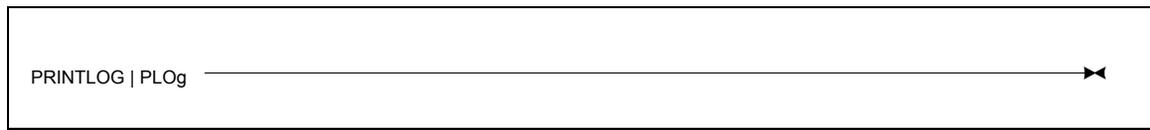
## PREPROC

Displays the Options - Preprocessors pop-up. The Options-Preprocessors pop-up is used to select the preprocessor group to be used in your SmartEdit session.



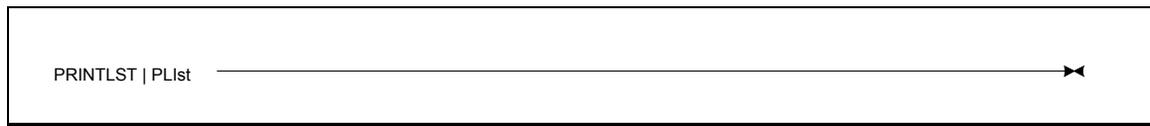
## PRINTLOG

Displays the Options - Log/List/Punch Definition pop-up for processing of the Log, List, and Punch files. You can enter the PRINTLOG command on any SmartEdit screen.



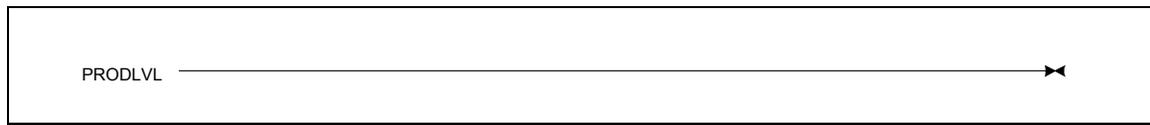
## PRINTLST

Displays the Options - Log/List/Punch Definition pop-up for processing of the Log, List and Punch files. You can enter the PRINTLST command on any SmartEdit screen.



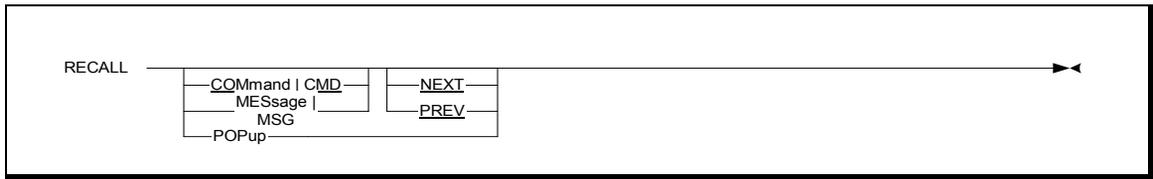
## PRODLVL

Displays the current SmartEdit and Center product levels on the message line, including the product name, operating system, product release number, and level.



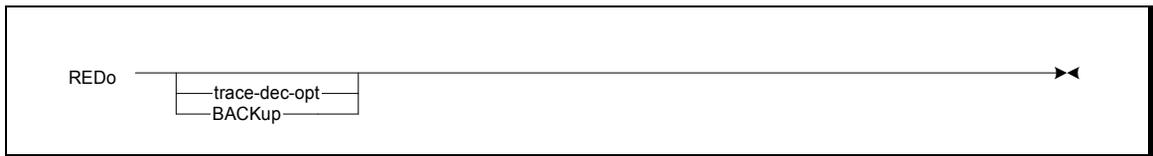
## RECALL

Displays the previous primary command, pop-up, or message. The last 20 commands that have been executed and the last 20 messages that have been displayed are stacked. Use RECALL to redisplay these commands or messages in sequential order. The POPUP operand redisplays the most recent pop-up.



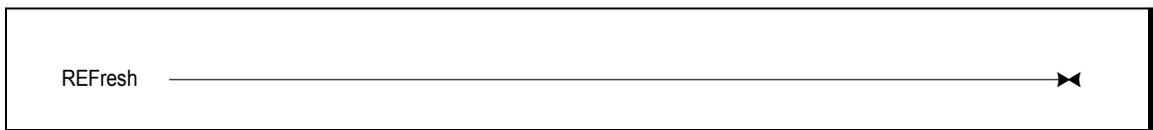
## REDO

Executes the corresponding repeat command after execution of the FIND, FINDXTND, HIGH, PREF, SCROLL, or TRACE command.



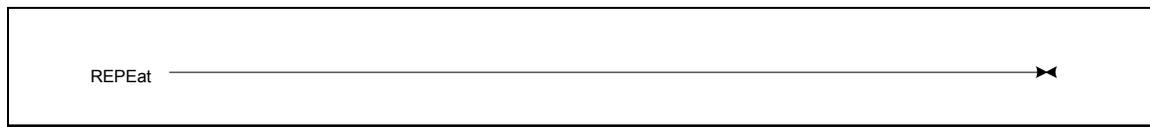
## REFRESH

Updates the CALL summaries in the current program for a CALLED program that has been analyzed since opening the current program.



## REPEAT

Reexecutes the last stacked primary command from the cursor position.



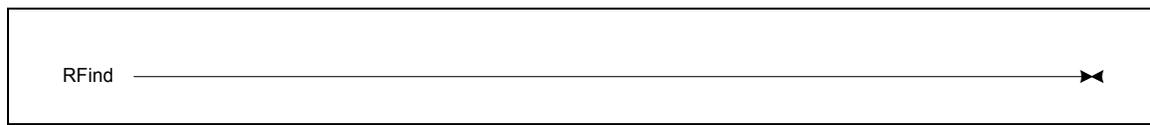
## RESET

Turns off highlighting, erases tags, redisplay excluded lines, cancels pending line commands, and terminates message line displays. Any combination of operands can be specified.



## RFIND

Repeats the last FIND or FINDXTND command from the cursor position. The search is in the direction indicated in the last FIND or FINDXTND command.



## RHIGH

Repeats the last HIGH command from the cursor position.

RHgh \_\_\_\_\_



## RPREF

When on the Source View screen, RPREF redisplay the last View - Paragraph Cross Reference pop-up. When used on the View - Paragraph Cross Reference pop-up, the last Source View screen redisplay. If you enter RPREF without having entered a PREF command, RPREF functions as a PREF command with the current cursor location as the target and default direction.

RPref \_\_\_\_\_



## RSCROLL

Repeats the last SCROLL command from the cursor position.

RScroll \_\_\_\_\_



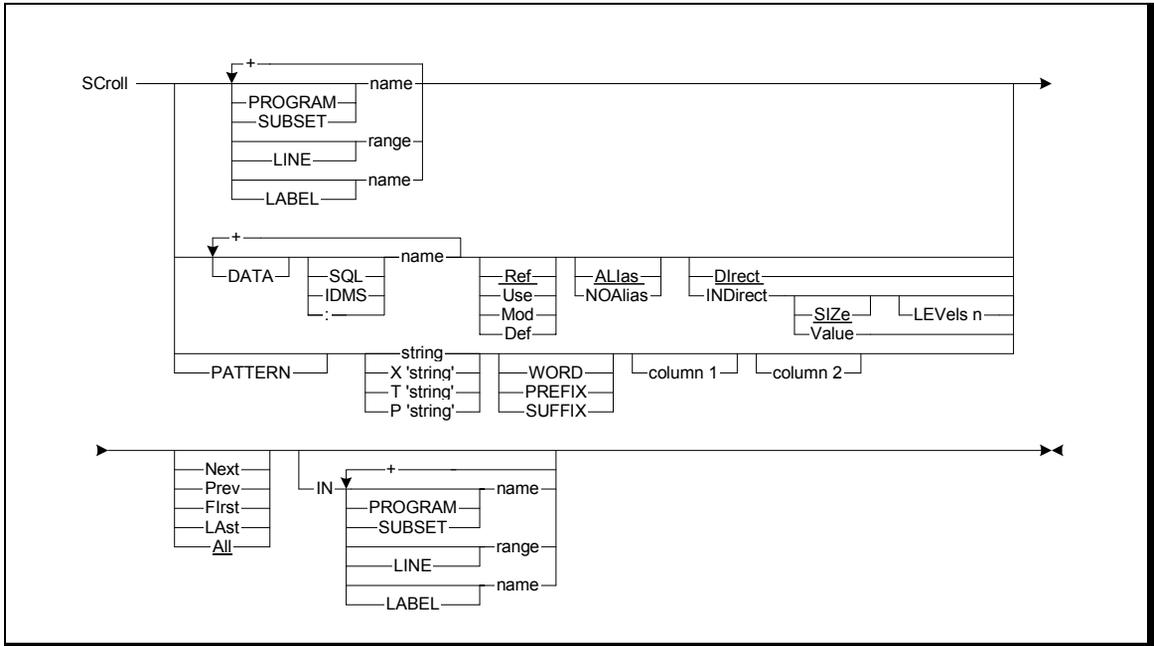
## RTREEVW

Returns to the previous Tree View screen.



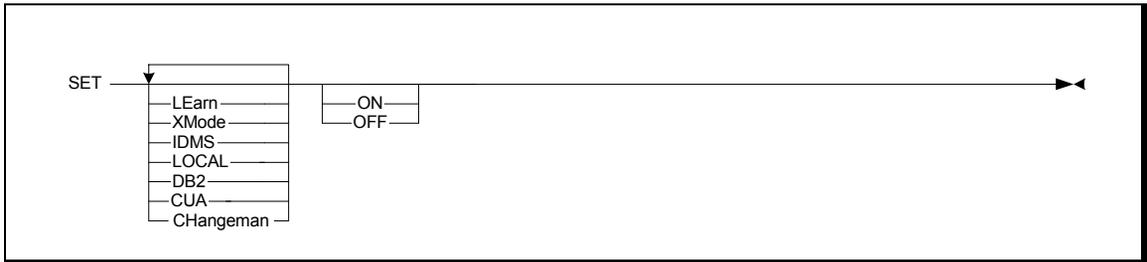
## SCROLL

Scrolls to the first line or box containing the specified target without resetting highlighted lines or boxes.



## SET

Enables or disables the mode indicated by the specified operand. If entered without any operands, the Options - Processing Modes pop-up displays showing the current setting for each SET command mode. You can also change modes on the Options -Processing Modes pop-up.



## SWITCH

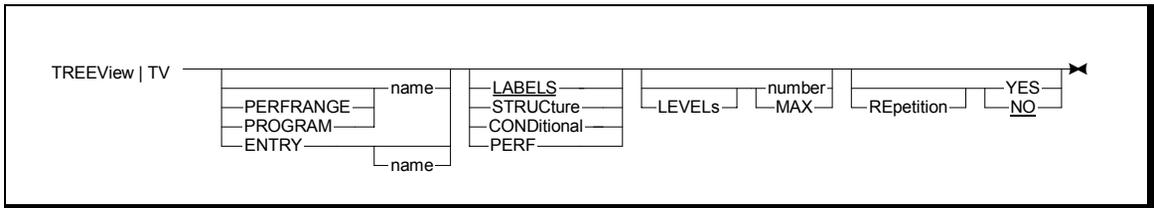
Acts as a toggle to switch between the SmartEdit action bar and the ISPF Editor action bar.

If you are not using ISPF 4.1 through 4.8, the SWITCH command displays the SmartEdit action bar for the current session.



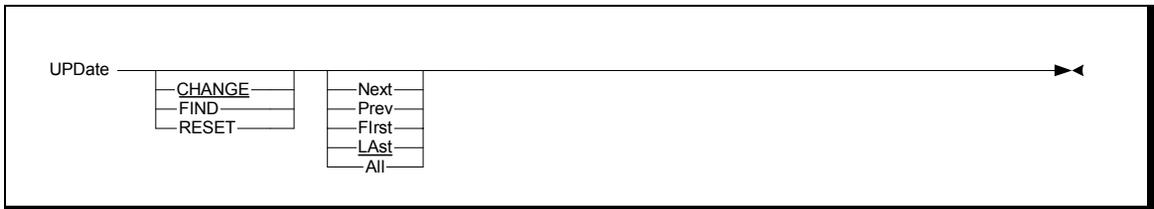
## TREEVIEW

Displays the Tree View screen which shows the structural representation of a COBOL program in logical execution order. If you do not specify a target or level, the default is the main program at level 2.



## UPDATE

Changes pseudo code lines (created in SmartTest) to actual COBOL source lines, making them part of the program. After you enter the UPDATE command, the File - Generated Code Update Facility pop-up displays. Specify the program containing the pseudo code that you want to update.



## ZOOM COPY

Brings in all copy members included by the current source module.

ZOOM COPY | ZC \_\_\_\_\_ ▶

## ZOOM DEF

Brings in the definition of any data items on the line corresponding to the current cursor location, or the first line of the screen. The definitions of logical database entities located in the DB2 System Catalog or the IDMS Data Dictionary are also included.

ZOOM DEF | ZD \_\_\_\_\_ ▶

## ZOOMIN/ZOOMOUT

Displays or excludes source code lines according to the hierarchical levels of the program. Use in conjunction with each other to show the structure of a program, provide a means of stepping through each level, or going directly into or out of a particular section of source code.

ZOOMIn | ZI \_\_\_\_\_ ▶  
ZOOMOut | ZO \_\_\_\_\_ ▶



---

# 2

## Operand Definitions

---

Operand	Description
: name	Includes datanames that are COBOL variables only.
cmd	Represents a SmartEdit primary command.
column1	Specifies the column number where the search is to begin.
column2	Specifies the column number where the search is to end.
comment	Represents text following the NOTE operand that describes the name.

Operand	Description
DATA <i>name</i>	<p>Specifies a COBOL dataname or qualified COBOL dataname. DATA name refers to any valid COBOL reference for a data element. The DATA name operand also accepts these values:</p> <ul style="list-style-type: none"><li>• Use Occurrences of the dataname where its value is tested or used (including aliases unless using NOALIAS).</li><li>• Mod Occurrences of the dataname where its value is set or modified (including aliases unless using NOALIAS).</li><li>• Def Definitions for the dataname in the DATA DIVISION (including aliases unless using NOALIAS).</li><li>• <u>Ref</u> Use, Mod, and Def.</li><li>• <u>ALias</u> Includes aliases of the dataname.</li><li>• NOAlias Does not include aliases of the dataname.</li><li>• <u>DIRect</u> Considers only the specified dataname.</li><li>• INDirect Includes occurrences of any dataname indirectly affected by the specified dataname (and aliases, if specified).</li><li>• <u>SIZE</u> Considers datanames indirectly affected by a change in the size of the specified dataname.</li><li>• VALue Considers datanames directly or indirectly affected by a change in the value of the specified dataname.</li><li>• LEVels <i>n</i> Identifies the depth of the indirect references.</li></ul>

---

Operand	Description
ENTRY <i>name</i>	Specifies an entry point name. If you specify ENTRY without a <i>name</i> , the main program and all ENTRY points are included.
IDMS <i>name</i>	Includes datanames that are IDMS variables only.
LABEL <i>name</i>	Specifies any paragraph or section name of the PROCEDURE DIVISION, as well as the literals PROCEDURE and PROC. This includes all transfers of control to the label name.
LEVELS <i>number</i>	Specifies the lowest to highest hierarchical level of code.
LINE <i>number</i>	Represents a single line number.
LINE <i>range</i>	Represents a single line number or range of lines.
<i>msg#</i>	Specifies the number of an error message or information message.
<i>name</i>	Specifies a name for a character string. This name can be up to 10 alphanumeric characters, must begin with an alphabetic character, and can include hyphens. The name can also be a PERFRANGE name, LABEL name, DATA name, or SUBSET name. See the specific operand for more information.
NOTE <i>comment</i>	Specifies a user-supplied description.

Operand	Description
PATTERN <i>string</i>	<p>Specifies a string of alphanumeric characters. If the string contains blanks, it must be enclosed in quotes. The PATTERN string operand also accepts these values:</p> <ul style="list-style-type: none"><li>• X 'string' Hexadecimal string</li><li>• T 'string' Text string</li><li>• P 'string' Picture string</li><li>• WORD Pattern string directly preceded and followed by any non-alphanumeric characters other than hyphens</li><li>• PREFIX Word that begins with the pattern</li><li>• SUFFIX Word that ends with the pattern</li></ul>
SQL <i>name</i>	Includes datanames that are DB2/SQL variables only.

Operand	Description
<i>string</i>	Specifies a character string to be substituted by the EQUATE command. Also, a string of alphanumeric characters. See the PATTERN string operand for more information.

SUBSET *name* Specifies COBOL verbs of a similar nature that have been grouped together. These are the predefined COBOL language subsets:

- ASsignment    DEBug            IO
- CALL            DEFinition        LABel
- CIEs            DIRective        MAINline
- COBOLII        DIVision          MATH
- COBOL/370    DL/I | DL/1        Output
- COMment       DML                PARagraph
- CONditional   ENtry              PERform
- COPy           EXIt | PGMExit    RETurn
- DB2/SQL       FALLthrough       SECTION
- DDL            GOto                SORTMerge
- DEAD           IDMS                STRucture
- DEADCode      INclude            TAG
- DEADData      Input                TESTed | UNTESTed

**Note:**

TESTed and UNTESTed subsets are available only if you have applied TCA results. See the *ASG-SmartTest TCA User Guide* for more information.

Screen subsets:

- Highlighted|HIExcluded|X
- NONHighlighted|NHINONExcluded|NX

A tagged lines subset of tags appearing in columns 73 through 80 of the Program View screen.



---

# 3

## Tree View Line Commands

---

Line Command	Description
DM	Datamap. Displays the length of a data item and the length and offset for any data items that are contained within the selected data item.
EC	Editcopy. Locates a copybook and opens it in an edit session using your default editor. If SmartEdit is not your default editor, an ISPF edit session is opened for the specified copybook. You can use this command on all copybooks (except certain SQL Includes) that are currently viewable in the edit.
EP	Editpgm. Locates a CALLED program and opens it in an edit session using your default editor. If SmartEdit is not your default editor, an ISPF edit session is opened for the specified program. You can use this command on all programs that are currently viewable in the edit.
F <i>n</i>	First. Redisplays the specified number of excluded lines, starting with the first line in the block. The default is 1.
J	Jump. Returns to the Editor screen at the location corresponding to the line where this command is issued on the Tree View screen.
L <i>n</i>	Last. Redisplays the specified number of excluded lines, starting with the last line in the block. The default is 1.
S <i>n</i>	Show. Redisplays the specified number of excluded lines, starting with the first line in the block. The default is 1.

Line Command	Description
SS	Show Block. Redisplays a block of lines that were previously excluded.
X $n$	Exclude. Hides a line or group of lines from being displayed. Excluded lines are replaced with a row of dashes. The default is 1.
XX	Exclude Block. Excludes a block of lines from being displayed.
ZI	Zoom In. Redisplays excluded source lines according to the hierarchical levels in the program and expands copy members in context. The ZI line command is used in conjunction with the ZO (zoomout) line command to show the structure of a program and provide a means of stepping through each level or going directly into or out of a particular section of source code.
ZO	Zoom Out. Redisplays a source line in its original format after a Zoom line command. Use the ZO (Zoom Out) line command in conjunction with the ZI (Zoom In) line command to show the structure of a program, provide a means of stepping through each level, or going directly into or out of a particular section of source code. The ZI (Zoom In) and ZO (Zoom Out) line commands display or exclude source lines according to the hierarchical levels of the program.

---

# 4

## Source View Line Commands

---

Line Command	Description
BR	Branch. Positions the cursor at the specified target. This line command is not valid on the Tree View screen.
DM	Datamap. Displays the length of a data item and the length and offset for any data items that are contained within the selected data item.
EC	Editcopy. Starts an ISPF edit session for the specified copybook. You can use this command on all copybooks that are currently viewable in the edit.
EP	Editpgm. Locates a CALLED program and opens it in an edit session using your default editor. If SmartEdit is not your default editor, an ISPF edit session is opened for the specified program. You can use this command on all programs that are currently viewable in the edit.
F <i>n</i>	First. Redisplays the specified number of excluded lines, starting with the first line in the block. The default is 1.
L <i>n</i>	Last. Redisplays the specified number of excluded lines, starting with the last line in the block. The default is 1.
S <i>n</i>	Show. Redisplays the specified number of excluded lines, starting with the first line in the block. The default is 1.
SS	Show Block. Redisplays a block of lines that were previously excluded.

Line Command	Description
$X_n$	Exclude. Hides a line or group of lines from being displayed. Excluded lines are replaced with a row of dashes. The default is 1.
XX	Exclude Block. Excludes a block of lines from being displayed.
ZD	Zoom Def. Brings in the definition of any data items on the line where you enter ZD. This command is not valid on the Tree View screen, or outside the PROCEDURE DIVISION.
ZI	Zoom In. Redisplays excluded source lines according to the hierarchical levels in the program, and expands copy members in context. Use the ZI line command in conjunction with the ZO (zoomout) line command to show the structure of a program and provide a means of stepping through each level or going directly into or out of a particular section of source code.
ZO	Zoom Out. Redisplays a source line in its original format after you enter a Zoom line command. Use the ZO (Zoom Out) line command in conjunction with the ZI (Zoom In) line command to show the structure of a program, provide a means of stepping through each level, or going directly into or out of a particular section of source code. The ZI (Zoom In) and ZO (Zoom Out) line commands display or exclude source lines according to the hierarchical levels of the program.

---

# 5

## Editor Parameters

---

Parameters	
Input(x,x,...x)	Output(x,x,...x)
NOInput(x,x,...x)	NOOutput(x,x,...x)
IO(x,x,...x)	PANCopy
NOIO(x,x,...x)	NOPANCopy
LIBCopy	RETurn(x,x,...x)
NOLIBCopy	NORETurn(x,x,...x)



---

# 6

## PF Key

---

### Primary Defaults

PF Keys	
PF1/13 - HELP	PF7/19 - UP
PF2/14 - SPLIT	PF8/20 - DOWN
PF3/15 - END	PF9/21 - SWAP
PF4/16 - RTREEVW	PF10/22 - BRANCH

### Suggested Alternate PF Keys

SmartEdit uses your existing ISPF PF keys. However, ASG recommends that you reassign a few of your default ISPF keys to make optimum use of SmartEdit. Type `KEYS` to display the ISPF PF Key Definitions and Labels screen and make these changes

PF Keys
PF1/13 - ZOOMIN
PF4/16 - ZOOM DEF
PF12/24 - ZOOMOUT



---

# 7

## Action Bar Commands Equivalents

---

Command	Pull-Down	Action; Option
ALLOCDEF	Options	Product Allocations
BRANCH	Search	Branch
CHECK	Check	Perform Syntax Check
DISPLAY	File	Display Segment, Display Task
EQUATE	Options	Equate
EXCLUDE	Search	Data, Label, Pattern, Subset, Program, Line, or Any
	View	Exclude
FINDXTND	Search	Data, Label, Pattern, Subset, Program, Line, or Any
HELP	Help	All actions
HIGH	Search	Data, Label, Pattern, Subset, Program, Line, or Any
JUMP	View	Jump
LEVELS	View	Levels
LIST	List	All actions

Command	Pull-Down	Action; Option
LPRINT	Search	Data, Label, Pattern, Subset, Program, Line, or Any
LPUNCH	Search	Data, Label, Pattern, Subset, Program, Line, or Any
PARMDEF	Options	Product Parameters
PREF	View	Paragraph X-Ref
PREPROC	Options	Preprocessors
PRINTLOG	Options	Log/List/Punch
PRINTLST	Options	Log/List/Punch
PRODLVL	Help	About
REFRESH	Options	Refresh
RESET	View	Reset
RTREEVW	View	Return to Tree view
SCROLL	Search	Data, Label, Pattern, Subset, Program, Line, or Any
SET	Options	Processing Modes
TREEVIEW	View	Tree
ZOOM COPY	View	Zoom All Copies
ZOOM DEF	View	Zoom Definition

---

***Action Bar Commands Equivalents***

Command	Pull-Down	Action; Option
ZOOMIN	View	Zoom in
ZOOMOUT	View	Zoom out



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